

Detailed Monte Carlo Study of $Z \rightarrow q\bar{q}$

- Two bugs found in Stntuple correction module of Run I algorithm.
- One explains the zero charged fraction events, they are gone.
- The other is in track-ces matching, hasn't been fixed yet.

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- Have begun long process of cataloging (and fixing hopefully) algorithm mistakes using Monte Carlo info.
- Start with first event in sample, and the two most energetic towers from the Z.
- One tower comes from each of the two leading jets.

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Tower 1: 3 tracks that sum to 20 GeV,
plus an overlapping neutron of 4 GeV,
called a track tower (difficult tower!)

	Run 1b algor	MC	Diff
E (GeV)	20.23	24.6	-18%
P _x	7.04	7.7	-9%
P _y	17.0	20.9	-19%
P _z	7.7	10	-24%

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Tower 2: 3 photons that sum to 22.5 GeV,
plus an overlapping track of 1.9 GeV,
called correctly a mixed tower

	Run 1b algor	MC	Diff
E (GeV)	23.84	24.5	-3%
P _x	-7.9	-7.7	-2%
P _y	-19	-20	+5%
P _z	-9	-11.7	+22%